

CSE 316 July 2022 - Project Proposal

Subsection	A2		
Project Name	Tetris		
Team Members	1905042, 1905046, 1905047, 1905048, 1905052		
Motivation	Though it has no impact on real life problem but it is entertaining for us to implement this game as a hardware as we have only developed software till today. This project will give us a good knowledge about different components such as LED matrix, LCD screen, Thumb Joystick, Microcontroller etc. We can learn how to implement hardware in real life. Anyway, the people will always have the craze of arcade games.		
Description	For the game console we will use LED Matrix and thumb joystick for movement and rotation of pieces. A piece can move left or right and down to drop faster with joystick. An LCD screen will show the value of score. We will try to build sound effect for rotation and row fills.		
Computing unit	Atmega32		
Instruments			
	Name	Model Number	Units
	Microcontroller	Atmega32	2
	LED matrix		3
	LCD screen		1
	Thumb joystick		1
	Buzzer		1
	Battery		1
	USBasp Programmer		1
	Breadboard		2
	Wire		Many
	Resistor		Many
	Potentiometer		1

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Subsection	A2																																						
Project Name	Digital Stick for Blind																																						
Team Members	1905042, 1905046, 1905047, 1905048, 1905052																																						
Motivation	This project has a significant impact on real world. The people who cannot see can walk with the help of this stick. As a normal people we cannot realize how lucky we are. But the blind people have to face many problems in their life. So, it is a gift from us for them.																																						
Description	We want to develop an embedded system on a digital stick that help the blind people to detect obstacles and guide them via voice commands. We will try to build an android app which will work on Bluetooth connectivity. It will guide the blind people to turn left or right wherever there is more free space.																																						
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